

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for ensuring confidentiality of signal transmission in a point to multipoint data transmission network, wherein the network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the method comprising:

transmitting an upstream signal from a first station;

reflecting said upstream signal by at least two disturbing reflectors to produce a disturbing reflection; and

combining said disturbing reflection with a second reflection of said upstream signal by one of the at least two disturbing reflectors to render said second reflection undecodable by a second station to ensure confidentiality of signal transmission in a point-to-multipoint data transmission network.

2. (Previously Presented) The method according to claim 1, wherein, in the combining of said disturbing reflection, said second reflection comprises an unwanted reflection.

3. (Previously Presented) The method according to claim 1, wherein the transmitting of said upstream signal comprises using a transmission medium that comprises an optical fiber.

4. (Previously Presented) The method according to claim 3, wherein, in the transmitting of said upstream signal, said data transmission network comprises an Ethernet passive optical network and said first station comprises an optical network unit.

5. (Currently Amended) The method according to claim 3, wherein, in the reflecting of said upstream signal, said at least ~~one two~~ disturbing reflector reflectors ~~comprises~~ comprise at least ~~one two~~ discrete reflector reflectors.

6. (Currently Amended) The method according to claim 3, wherein, in the reflecting of said upstream signal, said at least ~~one~~ two disturbing ~~reflector~~ reflectors ~~comprises~~ comprise a at least two long continuous ~~reflector~~ reflectors.

7. (Currently Amended) The method according to claim 3, wherein, in the reflecting of said upstream signal, said at least ~~one~~ two disturbing ~~reflector~~ reflectors ~~is~~ are located in a redundant branch of an optical splitter.

8. (Currently Amended) A system for ensuring confidentiality of signal transmission in a point to multipoint data transmission network, wherein the said network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the system further comprising:

at least two disturbing reflectors placed upstream of a first station and a possible point of eavesdropping in a point-to-multipoint data transmission network, wherein at least one of the at least two disturbing reflectors is ~~are~~ configured to produce a disturbing reflection of a signal transmitted by said first station to ensure confidentiality of signal transmission in said point-to-multipoint data transmission network, to ~~make~~ combine said disturbing reflection to ~~combine~~ with a second reflection of said signal from one of the at least two disturbing reflectors.

9. (Currently Amended) The system according to claim 8, ~~wherein the at least one disturbing reflector is configured to produce the disturbing reflection combined with the second reflection,~~ wherein said second reflection comprises an unwanted reflection.

10. (Currently Amended) The system according to claim 8, ~~wherein said at least one disturbing reflector is placed upstream of the possible point of eavesdropping in said transmission network comprising at least one transmission medium, and wherein said transmission medium comprises an optical fiber.~~

11. (Currently Amended) The system according to claim 10, ~~wherein said at least one disturbing reflector is placed upstream of the possible point of eavesdropping in said~~

~~transmission network comprising at least one transmission medium, and wherein said data~~  
transmission network comprises an Ethernet passive optical network and said station comprises  
an optical network unit.

12. (Currently Amended) The system according to claim 10, wherein said at least ~~one~~  
~~two~~ disturbing reflector reflectors ~~comprises~~ comprise at least ~~one~~ two discrete reflector  
reflectors.

13. (Currently Amended) The system according to claim 10, wherein said at least ~~one~~  
~~two~~ disturbing reflector reflectors ~~comprises~~ comprise a at least two long continuous reflector  
reflectors.

14. (Currently Amended) The system according to claim 10, wherein said at least ~~one~~  
~~two~~ disturbing reflector is reflectors are located in a redundant branch of an optical splitter.

15-20. (Canceled)

21. (Currently Amended) A transmission apparatus, comprising:  
at least one optical splitter;  
at least one connector for an optical network unit; and  
at least two disturbing reflector reflectors ~~placed upstream of a first station and a possible~~  
~~point of eavesdropping in said transmission network~~ configured to produce a disturbing  
reflection of a signal transmitted by said ~~a~~ first station and to make said disturbing reflection to  
combine with a second reflection of said signal from one of the at least two disturbing reflectors.

22. (Currently Amended) The transmission apparatus according to claim 21, wherein  
~~said at least one disturbing reflector produces said disturbing reflection combining with said~~  
~~second reflection~~, wherein said second reflection comprises an unwanted reflection.

23. (Currently Amended) The transmission apparatus according to claim 22, wherein  
said disturbing reflector ~~comprises~~ reflectors comprise at least one discrete reflector.

24. (Currently Amended) The transmission apparatus according to claim 22, wherein said disturbing ~~reflector comprises~~ reflectors comprise a at least two long continuous ~~reflector~~ reflectors.

25. (Currently Amended) The transmission apparatus according to claim 22, wherein said disturbing ~~reflector is~~ reflectors are located in a redundant branch of an optical splitter.

26. (Currently Amended) A point-to-multipoint data transmission network, comprising:

at least one hub;

at least one transmission medium;

at least one station connected to said hub via said at least one transmission medium;

transmission means for transmitting an upstream signal from a first station;

reflection means for ~~reflecting said upstream signal by at least two disturbing reflection~~ means for producing a disturbing reflection; and

combination means for combining said disturbing reflection with a second reflection of said upstream signal from the reflection means to render said second reflection undecodable by a second station.

27. (Currently Amended) A system for ensuring confidentiality of signal transmission in a ~~point-to-multipoint data transmission~~ network, wherein the network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the system further comprising:

at least two disturbing reflection means, placed upstream of a first station and a possible point of eavesdropping in a ~~point-to-multipoint data transmission~~ the network, for producing a disturbing reflection of a signal transmitted by said first station ~~for ensuring confidentiality of signal transmission in a point-to-multipoint data transmission network,~~ wherein said disturbing reflection is combined with a second reflection of said signal from one of the at least two disturbing reflection means, ~~wherein the point-to-multipoint data transmission network~~

~~comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium.~~

28. (Currently Amended) A ~~networks~~ transmission network comprising:  
at least one hub;  
at least one transmission medium;  
at least one station connected to said hub via said at least one transmission medium; and  
at least two disturbing reflection means, placed upstream of a first station and a possible point of eavesdropping in said transmission network, for producing a disturbing reflection of a signal transmitted by said first station, wherein said disturbing reflection is combined with a second reflection of said signal from one of the at least two disturbing reflection means.

29. (Currently Amended) A transmission apparatus, comprising:  
at least one optical splitters;  
at least one connector for an optical network unit; and  
at least one disturbing reflection means, placed upstream of a first station and a possible point of eavesdropping in ~~said a~~ transmission network, for producing a disturbing reflection of a signal transmitted by said first station, wherein said disturbing reflection is combined with a second reflection of said signal from one of the at least two disturbing reflection means.